

AMENDMENTS

In the Claims

1. (Currently Amended) A network device comprising:  
a duplicate packet map (DPM), wherein  
said DPM comprises  
a ~~previous time interval~~ first DPM field comprising a first plurality of bit entries, and  
a ~~current time interval~~ second DPM field comprising a second plurality of bit entries,  
said first DPM field is designated as a previous time interval field,  
said second DPM field is designated as a current time interval field,  
said previous time interval field corresponds to a previous time interval,  
said current time interval field corresponds to a current time interval,  
said previous time interval occurs before said current time interval,  
said previous time interval is substantially equal in duration to said current time interval, and  
said previous time interval is distinct from said current time interval;  
a packet summary value (PSV) generator, wherein  
said DPM is coupled to said PSV generator,  
said PSV generator is configured to, responsive to receiving a packet,  
extract data from said packet, and  
calculate a PSV using said data from said packet by virtue of being configured to  
generate hashed data by hashing said data from said packet  
using a hashing function, wherein  
said PSV corresponds to said hashed data, and  
said DPM is configured to receive said PSV; and  
a DPM bank, wherein  
said DPM bank is configured to store a plurality of DPMs ~~by virtue of comprising a plurality of memory cells,~~ and  
said plurality of DPMs comprises said DPM.

2. (Cancelled)
3. (Cancelled)
4. (Currently Amended) The network device of claim ~~[[3]]~~ 1, wherein said DPM is implemented as a Bloom filter.
5. (Currently Amended) The network device of claim ~~[[3]]~~ 1, wherein a ~~one~~ bit entry of each said first and second DPM fields corresponds to said PSV.
6. (Currently Amended) The network device of claim ~~[[3]]~~ 1, wherein said PSV comprises a third plurality of bit entries, and each bit entry of said first and second DPM fields corresponds to a bit in said third plurality of bit entries of said PSV.
7. (Currently Amended) The network device of claim ~~[[3]]~~ 1, wherein said PSV comprises a third plurality of bit entries, each bit entry of said first plurality of bit entries and each bit entry of said second plurality of bit entries correspond to a bit entry of said third plurality of bit entries of said PSV, ~~each of~~ said first DPM ~~fields~~ field is configured to compare a value of a ~~corresponding~~ bit entry of said third plurality of bit entries of said PSV with a value of a corresponding bit entry of said first plurality of bit entries stored in said each of said DPM fields to generate an output, said second DPM field is configured to compare a value of a bit entry of said third plurality of bit entries of said PSV with a value of a corresponding bit entry of said second plurality of bit entries to generate an output, and a value of each of said outputs indicates whether said value of said ~~corresponding~~ bit entry of said third plurality of bit entries of said PSV matches said ~~value~~ values of stored in said corresponding bit entries of each of said ~~DPM fields~~ first plurality of bit entries and said second plurality of bit entries.

8. (Currently Amended) The network device of claim ~~[[3]]~~ 1, wherein said PSV comprises a third plurality of bit entries, each of said first and second DPM fields is configured to be addressed using said PSV, each bit entry of said first plurality of bit entries and each bit entry of said second plurality of bit entries is configured to be selected using said third plurality of bit entries of said PSV as an address, a value of said bit entry of said first plurality of bit entries and a value of said bit entry of said second plurality of bit entries correspond to said PSV, and ~~a value stored in a one of said DPM fields corresponding to a value of said PSV~~ said value of said bit entry of said first plurality of bit entries and said value of said bit entry of said second plurality of bit entries indicates whether said packet is said duplicate packet.
9. (Previously Presented) The network device of claim 1, wherein said PSV generator is configured to calculate said PSV using a cyclic redundancy check (CRC) calculation; and said data from said packet is path-independent.
10. (Previously Presented) The network device of claim 9, wherein the data from said packet excludes header and trailer information.
- 11.-14. (Cancelled)
- 15.- 16. (Cancelled)
17. (Previously Presented) The network device of claim 1, wherein each of said DPMs is implemented as a Bloom filter.
18. (Previously Presented) The network device of claim 1, wherein a first one of said DPMs is designated as a current DPM, and a second one of said DPMs is designated as a previous DPM.

19. (Previously Presented) The network device of claim 1, wherein said DPM bank further comprises:
- a DPM addressing unit coupled to said DPMs;
  - a selection unit coupled to said DPMs; and
  - a DPM control unit, coupled to control said DPM addressing unit, said DPMs and said selection unit.
20. (Original) The network device of claim 19, wherein said DPM control unit is configured to select a first one of said DPMs as a current DPM and a second one of said DPMs as a previous DPM.
21. (Original) The network device of claim 20, wherein said DPM control unit is configured to cause said DPM addressing unit to provide said PSV to said current DPM and said previous DPM; and said DPM control unit is configured to cause said selection unit to select said current DPM and said previous DPM.
22. (Original) The network device of claim 20, wherein said DPM control unit is configured to select said previous DPM as an inactive DPM and to clear said inactive DPM.
23. (**Currently Amended**) The network device of claim 1, further comprising:  
[[a]] **said** packet summary value (PSV) generator, ~~wherein~~  
**said duplicate packet map (DPM)** is coupled to **each of** said **PSV generator**  
**DPMs**.
24. (Original) The network device of claim 23, wherein said DPM bank further comprises:
- a DPM addressing unit coupled between said PSV generator and said DPMs; and
  - a selection unit coupled to said DPMs.
25. (Original) The network device of claim 24, wherein said DPM bank further comprises:
- a DPM control unit, coupled to control said DPM addressing unit, said DPMs and said selection unit.

26. (Original) The network device of claim 25, wherein  
said selection unit is configured to generate a hit signal, and  
said hit signal indicates that bit values of said PSV match bit values stored in  
corresponding locations in a one of said DPMs.
27. (Original) The network device of claim 9, wherein  
said PSV generator is configured to generate a PSV based on a packet received by said  
PSV generator, and  
said DPM is configured to receive said PSV.
28. (Original) The network device of claim 27, wherein  
said DPM is further configured to indicate that said PSV matches a PSV stored in said  
DPM.
29. (Original) The network device of claim 28, wherein said PSV generator is configured to  
generate said PSV using a cyclic redundancy check computation.
30. (Original) The network device of claim 9, further comprising:  
a packet processing unit, said packet processing unit comprising said PSV generator.
31. (Original) The network device of claim 30, further comprising:  
a DPM bank, wherein  
said DPM bank comprises said DPM,  
said DPM bank is configured to generate a hit signal, and  
said DPM bank is coupled to receive said PSV from said PSV generator and to  
provide said hit signal to said packet processing unit.
32. (Original) The network device of claim 31, wherein  
said hit signal indicates that a value of said PSV matches a value stored in a one of said  
DPMs.

33. (Original) The network device of claim 31, wherein  
said hit signal indicates that bit values of said PSV match bit values stored in  
corresponding locations in a one of said DPMs.
34. (Original) The network device of claim 31, wherein  
said packet processing unit is configured to process said packet using said hit signal.
35. (Original) The network device of claim 31, wherein  
said processing includes causing said packet processing unit to drop said packet based on  
said hit signal.
36. **(Currently Amended)** A method comprising:  
**generating causing** a packet summary value (PSV) **generator to generate a PSV,**  
wherein  
said generating said PSV comprises, responsive to receiving a packet,  
extracting data from said packet, and  
calculating said PSV using said data from said packet **by virtue of being**  
**configured to**  
**generate hashed data by hashing said data from said packet**  
**using a hashing function, wherein**  
**said PSV corresponds to said hashed data;** and  
determining if a field of a duplicate packet map (DPM) indicates ~~[[the]]~~ **said** packet is a  
duplicate packet, wherein  
said DPM is one of a plurality of DPMs included in a DPM bank ~~[[and]]~~ ,  
said determining uses said PSV, ~~wherein~~  
said PSV corresponds to said packet **by virtue of said PSV corresponding to**  
**said hashed data, and**  
said DPM comprises  
a ~~previous time interval~~ **first DPM** field ~~stored in a memory cell and~~  
**comprising a first plurality of bit entries,**  
a ~~current time interval~~ **second DPM** field **comprising a second**  
**plurality of bit entries,**

said first DPM field is designated as a previous time interval field,  
said second DPM field is designated as a current time interval field,  
said previous time interval field corresponds to a previous time interval,  
said current time interval field corresponds to a current time interval,  
said previous time interval occurs before said current time interval,  
said previous time interval is substantially equal in duration to said current  
time interval, and  
said previous time interval is distinct from said current time interval.

37. (Currently Amended) The method of claim 36, further comprising:  
indicating said packet is said duplicate packet, if said ~~determination~~ determining  
determines said packet is said duplicate packet.
38. (Original) The method of claim 37, further comprising:  
dropping said packet, if said packet is said duplicate packet.
39. (Currently Amended) The method of claim 37, wherein said determining comprises:  
comparing said PSV to said first DPM field, and  
comparing said PSV to said second DPM field.
40. (Currently Amended) The method of claim ~~[[39]]~~ 37, wherein  
said PSV comprises a third plurality of bit entries,  
each bit entry of said first plurality of bit entries and each bit entry of said second  
plurality of bit entries correspond to a bit entry of said third plurality of bit  
entries of said PSV,  
said ~~determination is made by~~ determining comprises  
comparing a value of a bit entry of said third plurality of bit entries of said  
PSV with a ~~bit stored in said field of said DPM~~ value of a  
corresponding bit entry of said first plurality of bit entries, and  
comparing said value of said bit entry of said third plurality of bit entries of  
said PSV with a value of a corresponding bit entry of said second  
plurality of bit entries, and

said indicating is performed if said value of said bit entry of said third plurality of bit entries of said PSV matches ~~said bit stored in said field of said DPM~~ said value of said corresponding bit entry of said first plurality of bit entries,  
and  
said value of said corresponding bit entry of said second plurality of bit entries.

41. (Currently Amended) The method of claim 40, further comprising:  
 setting said value of said corresponding bit entry of said first plurality of bit entries ~~stored in said field of said DPM~~ to ~~[[a]]~~ said value of said bit entry of said third plurality of bit entries of said PSV.
42. (Currently Amended) The method of claim 37, wherein said determining comprises:  
 selecting ~~said field~~ a bit entry of said first DPM field based on said PSV, and  
selecting a bit entry of said second DPM field based on said PSV.
43. (Currently Amended) The method of claim ~~[[42]]~~ 37, wherein  
said PSV comprises a third plurality of bit entries,  
each bit entry of said first plurality of bit entries and each bit entry of said second plurality of bit entries is configured to be addressed using said third plurality of bit entries of said PSV, wherein  
a value of said bit entry of said first plurality of bit entries and a value of said bit entry of said second plurality of bit entries correspond to said PSV,  
 said ~~determination is made by~~ determining comprises  
 selecting ~~said field of said DPM based on a value of~~ a corresponding bit entry of said first plurality of bit entries using said third plurality of bit entries of said PSV as an address, and  
selecting a corresponding bit entry of said second plurality of bit entries using said third plurality of bit entries of said PSV as an address, and  
 said indicating is performed if ~~[[a]]~~ said value of said bit entry of said first plurality of bit entries and said value of said bit entry of said second plurality of bit



~~entries stored in said field of said DPM~~ indicates that said packet is said duplicate packet.

44. (Currently Amended) The method of claim 43, further comprising:  
setting said value of said corresponding bit entry of said first plurality of bit entries  
~~stored in said field of said DPM~~, if said packet is not said duplicate packet.
45. (Previously Presented) The method of claim 44, further comprising:  
said generating said PSV further comprises calculating a cyclic redundancy check value  
based on said data in said packet, wherein  
said data from said packet excludes header and trailer information, and  
said data from said packet is path-independent.
46. (Cancelled)
47. (Previously Presented) The method of claim 37, further comprising:  
selecting a first DPM of said plurality of DPMs as a previous DPM; and  
selecting a second DPM of said plurality of DPMs as a current DPM.
48. (Original) The method of claim 47, further comprising:  
determining if a field of said previous DPM indicates said packet is said duplicate packet,  
using said PSV; and  
determining if a field of said current DPM indicates said packet is said duplicate packet,  
using said PSV.
49. (Original) The method of claim 48, further comprising:  
indicating said packet is not said duplicate packet, if said field of said previous DPM  
indicates said packet is not said duplicate packet and said field of said current  
DPM indicates said packet is not said duplicate packet, and  
indicating said packet is said duplicate packet, otherwise.

50. (Original) The method of claim 47, further comprising:  
selecting said previous DPM as an inactive DPM;  
selecting said current DPM as said previous DPM; and  
selecting another DPM of said DPMs as said current DPM.
51. (Original) The method of claim 50, further comprising:  
clearing said inactive DPM prior to said inactive DPM being selected as said current DPM.
52. (Original) The method of claim 50, wherein  
said selecting said previous DPM as said inactive DPM, said selecting said current DPM as said previous DPM, and said selecting said another DPM of said DPMs as said current DPM are performed periodically.
53. (Original) The method of claim 52, wherein  
a period of said performing periodically is such that said period is greater than an expected differential between duplicate packet arrivals and said period is less than a time between packet retransmissions.
54. (Original) The method of claim 52, wherein  
a period of said performing periodically is configured to allow said inactive DPM to be cleared prior to said inactive DPM being selected as said current DPM.
55. **(Currently Amended)** A network device comprising:  
a processor;  
a computer readable medium coupled to said processor; and  
computer code, encoded in said computer readable medium configured to cause said processor to:  
generate a packet summary value (PSV), wherein  
said computer code configured to cause said processor to generate said PSV comprises computer code configured to cause said processor to, responsive to receiving a packet,  
extract data from said packet, and

calculate said PSV using said data from said packet **by virtue of being configured to generate hashed data by hashing said data from said packet using a hashing function, wherein said PSV corresponds to said hashed data,** and determine if a field of a duplicate packet map (DPM) indicates said packet is a duplicate packet, wherein said DPM is one of a plurality of DPMs included in a DPM bank **[[and]]**, said computer code configured to cause said processor to determine uses a said PSV, said PSV corresponds to said packet **by virtue of said PSV corresponding to said hashed data,** and said DPM **includes comprises** a ~~previous time interval~~ **first DPM field comprising a first plurality of bit entries, and** a ~~current time interval~~ **second DPM field comprising a second plurality of bit entries,** **said first DPM field is designated as a previous time interval field,** **said second DPM field is designated as a current time interval field,** **said previous time interval field corresponds to a previous time interval,** **said current time interval field corresponds to a current time interval,** **said previous time interval occurs before said current time interval,** **said previous time interval is substantially equal in duration to said current time interval, and** **said previous time interval is distinct from said current time interval.**

56. (Original) The network device of claim 55, wherein said computer code is further configured to cause said processor to:
- indicate said packet is said duplicate packet, if said computer code configured to cause said processor to determine determines said packet is said duplicate packet.
57. (Currently Amended) The network device of claim 56, wherein said computer code is further configured to cause said processor to:
- compare said PSV to said first DPM field, and  
compare said PSV to said second DPM field.
58. (Currently Amended) The network device of claim 56, wherein said computer code is further configured to cause said processor to:
- select ~~said field~~ a bit entry of said first DPM field based on said PSV, and  
select a bit entry of said second DPM field based on said PSV.
59. (Previously Presented) The network device of claim 58, wherein said computer code is further configured to cause said processor to:
- generate said PSV by virtue of being configured to calculate a cyclic redundancy check value based on said data in said packet, wherein  
said data from said packet excludes header and trailer information, and  
said data from said packet is path-independent.
60. (Cancelled)
61. (Previously Presented) The network device of claim 55, wherein said computer code is further configured to cause said processor to:
- select a first DPM of said DPMs as a previous DPM; and  
select a second DPM of said DPMs as a current DPM.

62. (Original) The network device of claim 61, wherein said computer code is further configured to cause said processor to:
- determine if a field of said previous DPM indicates said packet is said duplicate packet, using said PSV; and
  - determine if a field of said current DPM indicates said packet is said duplicate packet, using said PSV.
63. (Original) The network device of claim 62, wherein said computer code is further configured to cause said processor to:
- indicate said packet is not said duplicate packet, if said field of said previous DPM indicates said packet is not said duplicate packet and said field of said current DPM indicates said packet is not said duplicate packet, and
  - indicate said packet is said duplicate packet, otherwise.
64. (Original) The network device of claim 61, wherein said computer code is further configured to cause said processor to:
- select said previous DPM as an inactive DPM;
  - select said current DPM as said previous DPM; and
  - select another DPM of said DPMs as said current DPM.
65. (Original) The network device of claim 64, wherein
- said computer code further configured to cause said processor to select said previous DPM as said inactive DPM, said computer code further configured to cause said processor to select said current DPM as said previous DPM, and said computer code further configured to cause said processor to select said another DPM of said DPMs as said current DPM are further configured to be performed periodically.
66. (Original) The network device of claim 65, wherein
- a period of said performing periodically is such that said period is greater than an expected differential between duplicate packet arrivals and said period is less than a time between packet retransmissions.

67. (Original) The network device of claim 65, wherein  
a period of said performing periodically is configured to allow said inactive DPM to be  
cleared prior to said inactive DPM being selected as said current DPM.
68. (Currently Amended) A ~~computer~~ computer-readable storage medium ~~storing a computer program product~~ comprising program instructions executable on a processor, the computer-readable storage medium encoding the program instructions, wherein the program instructions comprise:  
~~a computer-readable storage medium,~~  
a first set of instructions, ~~executable on a computer system and stored in said computer-readable storage medium,~~ configured to determine if a field of a  
duplicate packet map (DPM) indicates a packet is a duplicate packet, wherein  
said DPM is one of a plurality of DPMs included in a DPM bank ~~[[and]]~~ ,  
said first set of instructions is configured to determine if said field of said  
duplicate packet map indicates said packet is said duplicate packet using a  
packet summary value (PSV) corresponding to said packet, and  
said DPM comprises  
a ~~previous time interval~~ first DPM field comprising a first plurality of  
bit entries, [[and]]  
a ~~current time interval~~ second DPM field comprising a second  
plurality of bit entries,  
said first DPM field is designated as a previous time interval field,  
said second DPM field is designated as a current time interval field,  
said previous time interval field corresponds to a previous time  
interval,  
said current time interval field corresponds to a current time interval,  
said previous time interval occurs before said current time interval,  
said previous time interval is substantially equal in duration to said  
current time interval, and  
said previous time interval is distinct from said current time interval;  
and

~~an eighth~~ a second set of instructions, ~~executable on said computer system,~~ configured to generate said packet summary value (PSV), wherein

said ~~eighth~~ second set of instructions comprises instructions configured to cause said processor to, responsive to receiving said packet, extract data from said packet, and calculate said PSV using said data from said packet by virtue of being configured to

generate hashed data by hashing said data from said

packet using a hashing function, wherein

said PSV corresponds to said hashed data; and

~~computer readable storage media, wherein said computer program product is encoded in said computer readable storage media.~~

69. (Currently Amended) The ~~computer program product~~ program instructions of claim 68, further comprising:

a ~~second~~ third set of instructions, ~~executable on said computer system,~~ configured to indicate said packet is said duplicate packet, if said ~~computer code~~ first set of instructions configured to cause said processor to determine determines said packet is said duplicate packet.

70. (Currently Amended) The ~~computer program product~~ program instructions of claim 69, further comprising:

a ~~third~~ fourth set of instructions, ~~executable on said computer system,~~ configured to compare said PSV to said first DPM field, and  
compare said PSV to said second DPM field.

71. (Currently Amended) The ~~computer program product~~ program instructions of claim 69, further comprising:

a ~~third~~ fourth set of instructions, ~~executable on said computer system,~~ configured to select ~~said field~~ a bit entry of said first DPM field based on said PSV, and  
select a bit entry of said second DPM field based on said PSV.

72. (Currently Amended) The ~~computer program product~~ program instructions of claim 71, further comprising:

a ~~fourth~~ fifth set of instructions, ~~executable on said computer system,~~ configured to generate said PSV by virtue of being configured to calculate a cyclic redundancy check value based on said data in said packet, wherein said data from said packet excludes header and trailer information, and said data from said packet is path-independent.

73. (Cancelled)

74. (Currently Amended) The ~~computer program product~~ program instructions of claim 68, further comprising:

a ~~second~~ third set of instructions, ~~executable on said computer system,~~ configured to select a first DPM of said DPMs as a previous DPM; and  
a ~~third~~ fourth set of instructions, ~~executable on said computer system,~~ configured to select a second DPM of said DPMs as a current DPM.

75. (Currently Amended) The ~~computer program product~~ program instructions of claim 74, further comprising:

a ~~fourth~~ fifth set of instructions, ~~executable on said computer system,~~ configured to determine if a field of said previous DPM indicates said packet is said duplicate packet, using said PSV; and  
a ~~fifth~~ sixth set of instructions, ~~executable on said computer system,~~ configured to determine if a field of said current DPM indicates said packet is said duplicate packet, using said PSV.

76. (Currently Amended) The ~~computer program product~~ program instructions of claim 75, further comprising:

a ~~sixth~~ seventh set of instructions, ~~executable on said computer system,~~ configured to indicate said packet is not said duplicate packet, if said field of said previous DPM indicates said packet is not said duplicate packet and said field of said current DPM indicates said packet is not said duplicate packet, and



a ~~seventh~~ eighth set of instructions, ~~executable on said computer system,~~ configured to indicate said packet is said duplicate packet, otherwise.

77. (Currently Amended) The ~~computer program product~~ program instructions of claim 74, further comprising:

a ~~fourth~~ fifth set of instructions, ~~executable on said computer system,~~ configured to select said previous DPM as an inactive DPM;

a ~~fifth~~ sixth set of instructions, ~~executable on said computer system,~~ configured to select said current DPM as said previous DPM; and

a ~~sixth~~ seventh set of instructions, ~~executable on said computer system,~~ configured to select another DPM of said DPMs as said current DPM.

78. (Currently Amended) The ~~computer program product~~ program instructions of claim 77, wherein

said ~~fourth~~ fifth, said ~~fifth~~ sixth, and said ~~sixth~~ seventh set of instructions are performed periodically.

79. (Currently Amended) The ~~computer program product~~ program instructions of claim 78, wherein

a period of said performing periodically is such that said period is greater than an expected differential between duplicate packet arrivals and said period is less than a time between packet retransmissions.

80. (Currently Amended) The ~~computer program product~~ program instructions of claim 78, wherein

a period of said performing periodically is configured to allow said inactive DPM to be cleared prior to said inactive DPM being selected as said current DPM.

81. **(Currently Amended)** An apparatus comprising:
- means for generating a packet summary value (PSV), wherein
- said means for generating said PSV comprises means for, responsive to receiving a packet,
- extracting data from said packet, and
- calculating said PSV using said data from said packet, **wherein**
- said means for calculating said PSV comprises means for**
- generating hashed data by hashing said data from said**
- packet using a hashing function, and**
- said PSV corresponds to said hashed data;** and
- means for determining if a field of a duplicate packet map (DPM) indicates a packet is a duplicate packet, wherein
- said DPM is one of a plurality of DPMs included in a DPM bank **[[and]]** ,
- said means for determining uses said PSV, ~~wherein~~
- said PSV corresponds to said packet **by virtue of said PSV corresponding to**
- said hashed data, and**
- said DPM comprises
- a ~~previous time interval~~ **first DPM** field **comprising a first plurality of**
- bit entries** **[[and]]** ,
- a ~~current time interval~~ **second DPM** field **comprising a second**
- plurality of bit entries,**
- said first DPM field is designated as a previous time interval field,**
- said second DPM field is designated as a current time interval field,**
- said previous time interval field corresponds to a previous time**
- interval,**
- said current time interval field corresponds to a current time interval,**
- said previous time interval occurs before said current time interval,**
- said previous time interval is substantially equal in duration to said**
- current time interval, and**
- said previous time interval is distinct from said current time interval;**
- means for indicating said packet is said duplicate packet, **wherein**

said means for indicating is configured to indicate said packet is said duplicate packet if said means for determining determines said packet is said duplicate packet, and

said means for indicating comprises

a DPM addressing unit coupled to said DPMs,

a selection unit coupled to said DPMs, and

a DPM control unit, coupled to control said DPM addressing unit,

said DPMs, and said selection unit; and

means for selecting said field of said DPM based on said PSV.

82. (Cancelled)

83. **(Currently Amended)** The apparatus of claim 81, wherein said means for determining comprises:

means for comparing said PSV to said DPM.

84. (Cancelled)

85. (Previously Presented) The apparatus of claim 81, wherein:

said means for generating said PSV further comprises means for calculating a cyclic redundancy check value based on said data in said packet, wherein the data from said packet excludes header and trailer information, and the data from said packet is path-independent.

86. (Cancelled)

87. (Previously Presented) The apparatus of claim 81, further comprising:

means for selecting a first DPM of said DPMs as a previous DPM; and

means for selecting a second DPM of said DPMs as a current DPM.

88. (Original) The apparatus of claim 87, further comprising:  
means for determining if a field of said previous DPM indicates said packet is said duplicate packet, using said PSV; and  
means for determining if a field of said current DPM indicates said packet is said duplicate packet, using said PSV.
89. (Original) The apparatus of claim 88, further comprising:  
means for indicating said packet is not said duplicate packet, if said field of said previous DPM indicates said packet is not said duplicate packet and said field of said current DPM indicates said packet is not said duplicate packet, and  
means for indicating said packet is said duplicate packet, otherwise.
90. (Original) The apparatus of claim 87, further comprising:  
means for selecting said previous DPM as an inactive DPM;  
means for selecting said current DPM as said previous DPM; and  
means for selecting another DPM of said DPMs as said current DPM.
91. (Original) The apparatus of claim 90, further comprising:  
means for clearing said inactive DPM prior to said inactive DPM being selected as said current DPM.
92. (Original) The apparatus of claim 90, wherein  
said means for selecting said previous DPM as said inactive DPM, said means for selecting said current DPM as said previous DPM, and said means for selecting said another DPM of said DPMs as said current DPM perform their respective selections periodically.

93. (New) The method of Claim 36, wherein said hashing said data uses a plurality of hashing functions, wherein said plurality of hashing functions comprise said hashing function, and further comprising:

minimizing a number of some plurality of hashing functions used in said generating said PSV for a given probability of false positives, wherein

said DPM comprises a number of bits, and

said plurality of hashing functions used is proportional to a ratio of said number of bits in said DPM to a number of packets analyzed in a time period,

wherein

said time period is the combined duration of said current time interval and said previous time interval,

said time period can be dynamically adjusted by changing the duration of said current time interval and said previous time interval, and

said analysis comprises

said causing said PSV generator to generate said PSV, and

said determining if said field of said DPM indicates said packet is said duplicate packet.